

#17/K.T.  
7/5

RESPONSE

Docket No. J&amp;J-1673

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicants : Kutchan, Toni M., Zenk, Meinhart H., Atkins, David  
G., Fist, Anthony J.

Serial No. : 09/486,757

Art Unit: 1635

Filed : February 28, 2000

Examiner: Zara, J.

For : "CYTOCHROME P450 REDUCTASES FROM POPPY PLANTS"

RECEIVED

JUL 03 2002

I hereby certify that this correspondence is being facsimile transmitted  
to the Patent and Trademark Office, Fax No. (703) 308-4242 on

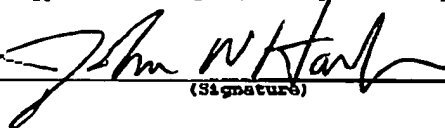
TECH CENTER 1600/2900

July 2, 2002

(Date of facsimile transmission)

John W. Harbour

(Name of applicant, assignee, or Registered Representative)



(Signature)

July 2, 2002

(Date of Signature)

Honorable Commissioner of Patents  
Washington, D.C. 20231

**AMENDMENT**

Dear Sir:

In response to the Official Action of January 2, 2002, please  
consider the following remarks:

**REMARKS/ARGUMENTS**

Claims 1 - 62 are pending in the application. Claims 1 - 56  
are withdrawn from consideration. Claims (56) and 57 - 62 stand  
rejected.

The Examiner is requested to review the use of claim 56 as  
opposed to claim 52. Claim 57 was amended in Applicant's

Ser. No. 09/486,757

Preliminary Amendment to be dependent on claim 52. Applicants submit that dependence from claim 52 as opposed to claim 56 does not substantially alter the substance of the claims.

Applicants attorney has considered the "Notice to Comply". There are two issues raised in this notice. (1) On page 5 of the "Raw Sequence Listing", there is a note regarding Applicant's use of "n". Applicants have used "n" in Sequence ID Nos.: 27, 28, 29, 30, 31 and 32. Applicants have reviewed these sequences and can state that a corresponding explanation is present in the <220> to <223> fields of each sequence using "n". (2) The issue regarding failure to comply with 37 CFR 1.821 to 1.825 is addressed below.

The Examiner has objected to the specification as failing to comply with the requirements of 37 CFR 1.821 to 1.825. Specifically, the Applicant is requested to identify at appropriate places in the specification which seq id nos have been used to successfully obtain expression of recombinant P-450 reductase. Applicants are reviewing this issue with the inventors.

The Examiner has rejected claims 57-62 under 35 U.S.C. 112, first paragraph, stating that the subject matter is not described in the specification in such a way as to enable one skilled in the art to which it pertains to make and/or use the invention.

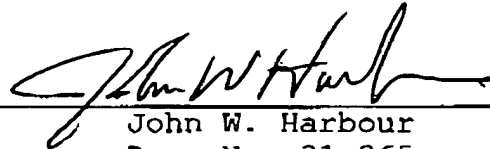
Applicants respectfully disagree. (1) The Examples being at page 14 of the specification clearly teach an ordinarily skilled molecular biologist to generate a full length P450 reductase from a variety of species. Specifically, Examples 1 and 2 teach the isolation of P450 from *P. somniferum* and *E. californica*. SEQ ID NOs. 26 and 25, respectively, provide the full length sequence of P450 molecules from *P. somniferum* and *E. californica* for example. Those of ordinary skill in the art can access other P450 molecules through publicly available databases. (2) Once the full length P450 molecule is in hand, Example 6 describes how to incorporate this enzyme into a poppy. Reference is made in Example 6 to an art known vector and to an art known agrobacterium strain. This is sufficient teaching for the skilled artisan. That certain formal requirements regarding the sequence listing of the DNA constructs of example 6 may not have been followed, has no bearing on the sufficiency in fact of the teaching of the specification. The Examiner is requested to reconsider.

Ser. No. 09/486,757

Should the Examiner have any questions she is invited to contact John W. Harbour at the telephone number provided below.

Respectfully submitted,

By:



John W. Harbour  
Reg. No. 31,365

Johnson & Johnson  
One Johnson & Johnson Plaza  
New Brunswick, NJ 08933-7003  
(732) 524-2169  
Dated: July 2, 2002

RECEIVED

JUL 03 2002

TECH CENTER 1600/2900